BURLINGTON ELECTRIC DEPARTMENT

2008 Energy Efficiency Annual Report

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1 Introduction & Summary

The Burlington Electric Department (BED) is pleased to submit the following report to the Burlington Electric Commission, the Vermont Public Service Board and the Vermont Department of Public Service summarizing the implementation of energy efficiency programs in the City of Burlington for the year 2008. BED remains committed to offering its customers high quality and affordable energy services and a secure, environmentally sound supply of electricity into the future. Energy efficiency continues to play a major role in achieving this goal, and is increasingly the cornerstone of BED's resource acquisition strategy.

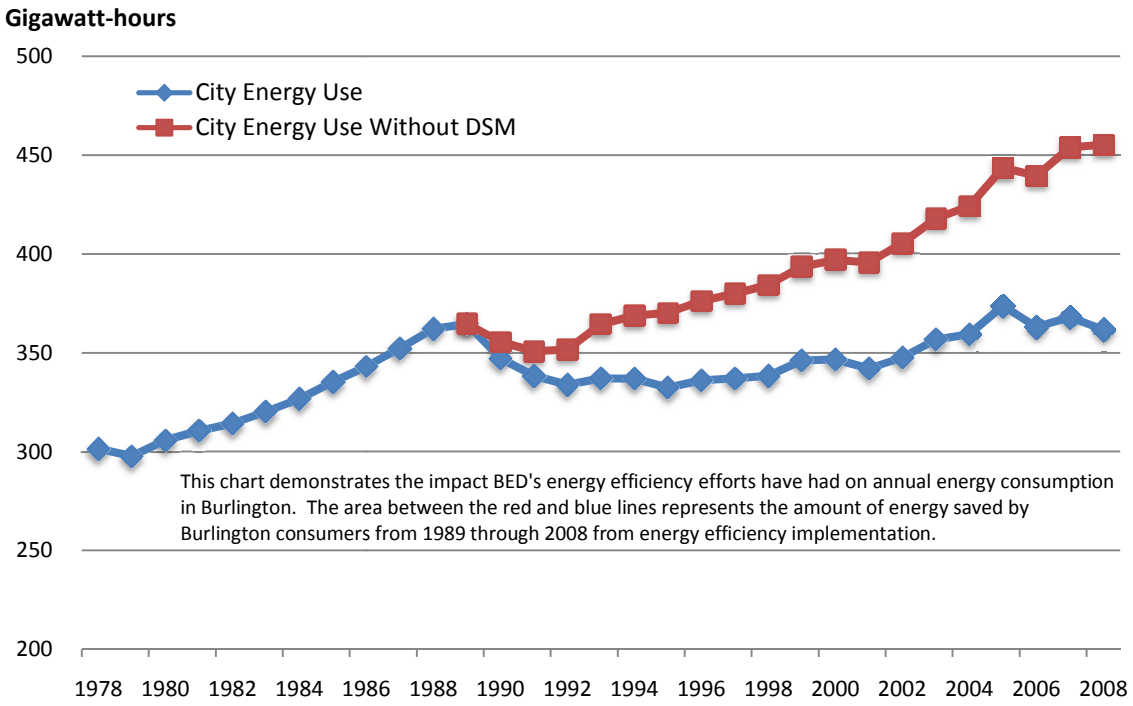
Energy efficiency has been clearly shown to be Vermont's least expensive future energy supply resource over time, and is every day a greater environmental imperative. The Burlington Electric Department is owned by all the citizens of Burlington, who have been unequivocally clear that the option for future supply that they prefer above all others is the pursuit of additional cost-effective energy efficiency.

Burlington voters in 1990 approved a bond to fund energy efficiency programs that supported program activities through 2002. Since 2003, BED customers (like all other Vermont electric customers) pay a small monthly charge that supports efficiency programs. When these funding sources are considered along with customers' direct investment, about $30 million has been invested in energy efficiency efforts sponsored by BED over the last 19 years. This is comprised of about $13 million spent by BED on all of its energy efficiency efforts during that period, and another $17 million in matching expenditures by its customers. The willingness to invest these private funds is a strong testament to the value that BED customers place on these services.

As Figure 1 indicates, the overall effect has been dramatic. Annual electricity consumption in 2008 was about 1% greater than in 1989. Thus, we have met the needs of substantial local economic growth over the last 19 years with about the same amount of electricity that we used then! Energy efficiency investments save Burlington consumers

over $8.9 million of retail electric costs annually. Energy efficiency expenditures are made almost entirely locally, typically in the form of professional services, skilled trades employment, and equipment purchases. Not only is the value of the City's building and energy-using equipment stock thus improved, but locally-retained dollars are "multiplied" many times over by subsequent consumer spending. Absent these energy efficiency expenditures, considerably more money would have gone towards the purchase of electricity and enhanced infrastructure to satisfy the increased demands on the City's electrical system. Most of these dollars would have been exported out of state, and many out of the country. Energy Efficiency is a win-win situation for the city of Burlington through increased local economic activity, the avoidance of increasingly costly electricity and its associated infrastructure and environmental impacts.

Figure 1: Impact of DSM on Total City Energy Use



During 2008 alone, BED saved 7,715 Megawatt hours (MWh) of energy from efficiency measures installed, which will result in 77,328 MWh of savings over the useful life of the installed measures (2008 measures have a weighted average lifetime of 10 years). This is equivalent to providing energy to about 1,400 Burlington residential customers for 10

years. During 2008, total BED program spending was $1,499,592 and participating customers spent an additional $1,127,075 of their own to fund energy efficiency investments in their facilities.

Harder to quantify, but of increasing importance to the ratepayers of Burlington are the environmental impacts avoided by decreasing the need for electricity. Thanks to the energy savings (7,715 MWh) generated by energy efficiency programs in 2008 alone, Burlington will have avoided the release of about 64,700 tons of carbon dioxide (CO2); the equivalent of removing about 1,785 cars from U.S. highways each year for the next 10 years.

BED continues to offer services that address as wide as possible a range of customer segments and electric end-uses. About 77% of the total energy savings in 2008 were made up of lighting fixture and controls installations, about 20% came from motor efficiency measures such as variable frequency drives and demand control ventilation along with air conditioning and refrigeration measures. These same measures were responsible for about 90% of the total summer coincident peak kW, 878 kW. The remainder of the energy and capacity saving came from a combination of industrial process, ventilation and from switching electric hot water and electric space heating systems to the use of other fuels.

BED is very pleased with the 2008 aggregate results. Overall, BED's combined energy efficiency services greatly exceeded energy-saving targets. BED projected 4,842 MWh savings and achieved 7,715 MWh. BED's projected budget was $1,620,435 and $1,499, 592 was spent, about 7% less than projected. As a result of these efforts, BED's cost for saved energy was below projections. BED estimated it would spend $334 per annualized MWh saved, and instead spent only $194 per annualized MWh. BED's administrative costs as a percentage of total program costs remained consistent with historical performance; about 29% of the budget was used to defray program operation costs. This amount includes marketing efforts, most of which are produced in cooperation with Efficiency Vermont.

Annual fluctuations in any energy efficiency program's performance depend on a variety of human and business cycle dimensions that are hard to quantify and even harder to predict with precision. The decision to move forward with an energy efficiency project is ultimately the individual customer's. Customers consider a wide variety of factors in their decision-making process, including their perceptions of local and national economic conditions and trends, their availability of funds and competing interests for the use of those funds, fluctuations in their business functions and volumes, and the opinion of off-site consultants and/or decision makers. Yearly cost and savings fluctuations across the spectrum of program efforts reflect the unpredictability of energy efficiency program timing, and support the notion that *annual* projections are no more than rough estimates. In the long run, the performance of BED's energy efficiency programs continues to exceed its expectations, as laid out in BED's Integrated Resource Plan of 2008. The consistency of these programs' performance with historic planning projections over time provides us confidence in the nature of energy efficiency as a stable, long-term energy resource.

This report includes coverage of BED's program activities related to the ninth year of operation of the State's — and the nation's — first Energy Efficiency Utility (EEU). Statewide energy efficiency programs are today operated under contract to the Vermont Public Service Board (PSB) by the non-profit service provider "Efficiency Vermont" (EVt). Thanks to a long history of successful program implementation, BED delivers the majority of these programs within the City of Burlington, continuing to build on its past success in helping Burlington's consumer-owners achieve energy efficient electric use.

BED and EVt annually revise a very detailed coordination plan that seeks to maximize the benefits of synergism to both organizations, and ultimately to all of Vermont's ratepayers. BED looks forward to continuing its successful partnership with the EVt, Vermont Gas Systems and the Champlain Valley Office of Economic Opportunity's Weatherization Service. These partnerships are key to the constant improvement of energy efficiency program services that are delivered to Vermonters.

BED also looks forward to continuing the focus on peak demand reduction in 2009 and beyond using the Public Service Board approved additional incremental increases in Burlington Electric Department (BED)'s service-territory specific EEC funds. The specific charge to BED in spending these enhanced funds is to reduce its growing summer air-conditioning peak load, a problem that has increasingly absorbed the attention of BED's own power planners. In response to the Board's order, BED will continue to focus those increased efforts on measures that address this phenomenon within the City.

In addition to traditional energy efficiency measures that focus on reducing peak demand, BED engaged in 2007 in demand response (DR) efforts supported by the New England Independent System Operator (ISO-NE). ISO-NE offers customers ongoing financial incentives to reduce peak electric use through load curtailment and\or on-site generation during its peak emergency periods. BED's system peak usually coincides with ISO-NE peak emergency periods.

BED is working in partnership with a demand services provider, EnerNoc, Inc., to help enroll key customers in the ISO-NE program. To date, this partnership has enrolled 17 of BED's largest accounts. Through these efforts to date BED hopes to reduce its peak load in the summer by about 5.2 megawatts (MW).

In 2008, BED expanded demand response efforts with EnerNoc and participating customers to include BED specific peak hours where peak load reduction outside of the typical ISO-NE hours would have additional economic benefits to BED. EnerNoc, with BED's assistance, has enrolled customers in the enhanced BED demand response that provides added customer payments beyond the ISO-NE program. To date there are ten accounts enrolled in the expanded DR program with close to 2 MW of critical peal load reduction capability.

BED is very pleased with the results of its DR program efforts to date and has received many positive customer comments about the program. DR has also provided BED with the additional opportunity to further strengthen customer relations and gain a deeper

understanding of our largest customers operations which has helped to uncovered further energy efficiency opportunities. BED has found that DR and energy efficiency can co-exist successfully and both are highly valued by customers.

BED is also looking forward to solidifying its Unregulated Fuels Initiative in 2009 and beyond. The VT-PSB has charged the EEU and BED with providing thermal shell and heating system energy efficiency services to unregulated fossil fuel customers.

BED and EVt have established a working partnership that will serve BED customers in the first part of 2009. BED customers will have access to the same exact services and incentives as those customers in the rest of the state. BED will work simultaneously on a longer term Unregulated Fuels program plan with the VT-DPS and present the plan to the VT-PSB during the summer of 2009.

BED's 2008 Annual Report is presented in sections. Pages 13-53 cover BED activities related to Business and Residential Energy Efficiency Utility (EEU) Electric services BED implements in Burlington. These EEU Electric services are:

- Business New Construction
- Business Existing Facilities
- Residential New Construction
- Existing Homes
- Efficient Products

Pages 58-73 cover programs BED has traditionally operated (non-EEU Electric services) over and above the statewide EEU programs. These services are:

- Commercial Smartlight
- Neighbor$ave
- Residential Smartlight

Table 1: All Business & Residential DSM History

	Participants			Costs						Savings			
	Install	Audits	Audit + Instlall	Admin	Services	Incentive	Evaluation	Participant	Program Total	Mwh	Lifetime Mwh	Winter Kw	Summer Kw
1991	391	95	0	$356,563	$0	$273,437	$6,015	$1,091,190	$1,727,205	3,703	52,103	1,224	0
1992	330	424	0	$334,066	$0	$264,615	$14,711	$1,104,050	$1,717,442	3,595	72,723	1,385	0
1993	1,343	1,130	517	$344,326	$0	$501,991	$107,646	$2,052,045	$3,006,008	9,198	133,079	2,634	0
1994	734	367	333	$367,600	$0	$197,054	$46,172	$927,802	$1,538,628	3,304	32,558	991	0
1995	827	66	193	$255,770	$0	$149,865	$16,666	$1,584,811	$2,007,112	6,764	31,402	1,650	0
1996	774	18	140	$215,329	$0	$118,006	$44,318	$500,363	$878,016	2,285	38,654	0	358
1997	735	35	80	$143,184	$0	$122,189	$6,011	$848,380	$1,119,764	2,665	39,091	0	714
1998	692	7	75	$204,588	$0	$107,140	$353	$731,707	$1,043,788	3,202	43,971	0	822
1999	675	26	68	$214,782	$0	$101,224	$1,529	$331,985	$649,520	1,300	14,174	0	358
2000	1,364	36	29	$334,762	$97,067	$148,162	$0	$761,673	$1,341,664	3,130	37,211	443	387
2001	1,410	240	238	$425,123	$129,955	$208,178	$59,637	$609,115	$1,432,008	3,094	41,258	398	341
2002	1,824	323	312	$469,263	$192,143	$407,057	$2,352	$1,178,695	$2,249,510	4,438	63,159	444	520
2003	1,897	190	187	$305,283	$365,691	$236,762	$19,006	$538,589	$1,465,331	3,346	56,332	346	361
2004	1,484	233	203	$253,037	$302,017	$271,856	$19,067	$638,819	$1,484,796	3,500	46,856	625	557
2005	1,977	237	208	$242,385	$351,009	$260,806	$5,904	$970,437	$1,830,541	4,948	69,570	630	630
2006	2,188	515	377	$221,862	$352,886	$381,706	$42,057	$702,575	$1,701,086	6,254	83,951	813	891
2007	2,045	373	324	$255,856	$375,480	$441,352	$52,025	$1,353,651	$2,478,364	9,227	120,683	1,234	1,023
2008	6,392	318	241	$447,867	$412,037	$639,691	$65,159	$1,127,075	$2,691,829	7,713	77,298	1,216	877
Total	27,082	4,633	3,525	$5,391,646	$2,578,285	$4,831,091	$508,628	$17,052,962	$30,362,612	81,666	1,054,073	14,033	7,840

(Note: All tables in this report reflect a 10% reduction in 2006 MWh savings claims as a result of the VT-DPS savings verification of 2006 projects)

Table 2: All Business DSM History

	Participants			Costs						Savings			
	Install	Audits	Audit + Instlall	Admin	Services	Incentive	Evaluation	Participant	Program Total	Mwh	Lifetime Mwh	Winter Kw	Summer Kw
1991	3	17	0	$130,784	$0	$1,849	$0	$2,157	$134,790	31	93	30	0
1992	16	117	0	$149,138	$0	$119,535	$4,063	$454,104	$726,840	246	24,388	227	0
1993	164	190	105	$162,366	$0	$305,473	$35,559	$1,308,524	$1,811,922	5,587	72,218	1,421	0
1994	104	85	116	$238,153	$0	$163,733	$21,690	$630,639	$1,054,215	2,242	14,970	626	0
1995	163	30	47	$199,835	$0	$142,342	$9,480	$1,368,954	$1,720,611	6,137	21,386	1,615	0
1996	151	15	36	$151,409	$0	$50,423	$28,498	$355,217	$585,547	1,233	16,150	0	334
1997	160	31	44	$78,321	$0	$96,959	$5,612	$757,774	$938,666	2,300	33,565	0	669
1998	164	3	20	$141,258	$0	$65,048	$50	$615,144	$821,500	2,767	37,930	0	734
1999	162	6	17	$150,772	$0	$71,501	$0	$270,056	$492,329	1,051	10,895	0	338
2000	145	11	8	$176,552	$56,070	$80,108	$0	$613,597	$926,327	2,438	28,712	309	334
2001	127	6	6	$255,082	$99,310	$84,729	$43,248	$384,763	$867,132	2,064	26,581	240	240
2002	113	0	0	$284,826	$112,447	$238,866	$252	$912,280	$1,548,671	2,888	43,183	224	392
2003	144	0	0	$154,937	$243,386	$148,306	$9,503	$254,905	$811,037	2,193	32,975	122	162
2004	142	98	68	$115,796	$192,327	$140,234	$3,928	$507,253	$959,538	2,505	35,419	335	394
2005	133	82	53	$133,542	$208,860	$202,143	$0	$814,001	$1,358,546	3,751	57,787	342	397
2006	150	115	89	$112,917	$240,425	$261,310	$24,533	$575,467	$1,214,652	5,094	73,084	503	652
2007	151	106	90	$125,761	$244,030	$280,213	$33,320	$977,132	$1,660,456	6,065	97,236	521	562
2008	115	98	64	$113,641	$250,666	$365,698	$43,576	$844,044	$1,617,625	3,520	52,474	399	357
Total	2,307	1,010	763	$2,875,090	$1,647,521	$2,818,470	$263,312	$11,646,011	$19,250,404	52,112	679,046	6,914	5,565

Table 3: All Residential DSM History

	Participants			Costs						Savings			
	Install	Audits	Audit + Install	Admin	Services	Incentive	Evaluation	Participant	Program Total	Mwh	Lifetime Mwh	Winter Kw	Summer Kw
1991	388	78	0	$225,779	$0	$271,588	$6,015	$1,089,033	$1,592,415	3,672	52,010	1,194	0
1992	314	307	0	$184,928	$0	$145,080	$10,648	$649,946	$990,602	3,349	48,335	1,158	0
1993	1,179	940	412	$181,960	$0	$196,518	$72,087	$743,521	$1,194,086	3,611	60,861	1,213	0
1994	630	282	217	$129,447	$0	$33,321	$24,482	$297,163	$484,413	1,062	17,588	365	0
1995	664	36	146	$55,935	$0	$7,523	$7,186	$215,857	$286,501	627	10,016	35	0
1996	623	3	104	$63,920	$0	$67,583	$15,820	$145,146	$292,469	1,052	22,504	0	24
1997	575	4	36	$64,863	$0	$25,230	$399	$90,606	$181,098	365	5,526	0	45
1998	528	4	55	$63,330	$0	$42,092	$303	$116,563	$222,288	435	6,041	0	88
1999	513	20	51	$64,010	$0	$29,723	$1,529	$61,929	$157,191	249	3,279	0	20
2000	1,219	25	21	$158,210	$40,997	$68,054	$0	$148,076	$415,337	692	8,499	134	53
2001	1,283	234	232	$170,041	$30,645	$123,449	$16,389	$224,352	$564,876	1,030	14,677	158	101
2002	1,711	323	312	$184,437	$79,696	$168,191	$2,100	$266,415	$700,839	1,550	19,976	220	128
2003	1,753	190	187	$150,346	$122,305	$88,456	$9,503	$283,684	$654,294	1,153	23,357	224	199
2004	1,342	135	135	$137,241	$109,690	$131,622	$15,139	$131,566	$525,258	995	11,437	290	163
2005	1,844	155	155	$108,843	$142,149	$58,663	$5,904	$156,436	$471,995	1,197	11,783	288	233
2006	2,038	400	288	$108,945	$112,461	$120,396	$17,524	$127,108	$486,434	1,160	10,867	310	239
2007	1,894	267	234	$130,095	$131,450	$161,139	$18,705	$376,519	$817,908	3,162	23,447	713	461
2008	6,277	220	177	$334,226	$161,371	$273,993	$21,583	$283,031	$1,074,204	4,193	24,824	817	520
Total	24,775	3,623	2,762	$2,516,556	$930,764	$2,012,621	$245,316	$5,406,951	$11,112,208	29,554	375,027	7,119	2,275

Table 4: All Business & Residential - Total Resource Benefits

Avoided costs of Electricity	$6,694,252.57
Fossil Fuel Savings	($126,128.58)
Water Savings	$142,732.03
TRB Total	$6,710,856.01

	Annualized	**Lifetim**
Meter MWh	6,169	64,178
Generation MWh	7,714	77,329
Meter Demand Kw	2,905	27,096
Generation Peak Summer Kw	877	8,407
Generation Peak Winter Kw	1,217	11,970
Water Savings	1,871	24,472
Fuel Increase	-2,099	-17,586
O+M Savings	$98,438	$580,274

Table 5: All Business & Residential - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	2,045	6,392	1,817	1,755	27,076
Audits	375	322			4,639
Audits with Installation	324	241			3,525
--- Program Costs ---					
BED Administration Costs					
General	$130,180	$166,350			$2,698,180
Implemntation	$52,187	$69,274			$1,833,261
Planning	$20,188	$1,806			$78,484
Marketing	$24,624	$177,336			$602,562
IT Development	$28,677	$33,100			$179,157
	$255,856	**$447,866**			**$5,391,645**
BED Service Costs					
Participants	$375,482	$412,036			$2,566,525
Trade Allies	$0	$0			$11,761
	$375,482	**$412,036**			**$2,578,286**
BED Incentive Costs					
Participants	$439,774	$639,549			$4,802,671
Trade Allies	$1,579	$141			$28,420
	$441,353	**$639,690**			**$4,831,091**
BED Total Costs	**$1,072,690**	**$1,499,592**			**$12,801,023**
Evaluation Costs	**$52,025**	**$65,159**			**$508,628**
Participant	**$1,353,652**	**$1,127,075**			**$17,052,961**
Total Program Costs	**$2,478,367**	**$2,691,826**	**$1,620,435**	**$1,468,885**	**$30,362,612**
--- Benefits ---					
Annualized	9,227	7,715	4,842	6,480	81,668
Lifetime mWh	120,683	77,328			1,057,103
Winter peak Kw	1,234	1,217			14,033
Summer Peak Kw	1,023	878			7,840
mWh / Participant	5	1	3	4	3
Weighted Lifetime	13	10			13

Table 6: All Business & Residential - End Use Summary

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Air Conditioning	227	294.18	302.84	5,076.24	17.46	110.46	0.00	0.00
Clothes Drying	8	7.82	6.89	96.40	1.85	1.33	-26.64	0.00
Clothes Washing	242	45.77	61.21	856.92	8.99	6.68	-24.67	1,512.40
Dishwashing	7	0.23	0.27	3.49	0.05	0.03	0.93	5.75
Engineered Custom	3	778.87	911.62	14,302.76	170.16	0.00	0.00	0.00
Hot Water	131	124.69	84.44	1,091.78	38.82	21.53	-380.34	352.80
Lighting	6314	4,550.68	5,933.46	49,721.79	949.59	700.09	-1,601.44	0.00
Motors	16	113.57	126.71	1,774.17	1.27	2.17	-223.00	0.00
Multiple	21	41.02	46.36	684.38	0.62	16.33	0.00	0.00
Refrigeration	238	133.69	152.73	2,098.88	14.89	13.64	0.00	0.00
Space Heating	24	73.50	81.95	1,567.95	12.74	4.58	-74.39	0.00
Ventilation	28	4.56	5.37	53.74	0.60	0.60	0.00	0.00
Total		6,168.58	7,713.84	77,328.51	1,217.04	877.44	-2,329.55	1,870.95

2 Overview of EEU Electric Services Results

Overall in 2008, the EEU services that BED implemented in partnership with Efficiency Vermont greatly exceeded annualized MWh targets. BED projected 4,734 annualized MWh savings and achieved 7,626 annualized MWh. This is largely due to the completion of several Business Existing Facility projects completed by UVM, Fletcher Allen Health Care, Gilbane Corporation (home of General Dynamics) and the Burlington School District. The Residential sector also had a strong year due to very large CFL sales through the retail buy down effort.

BED spent $1,478,562 in 2008, which is about 7% less then the projected budget of $1,597,414. In total, BED's EEU Services implementation saved 7,626 MWh of energy annually from installed measures that will result in 77,008 MWh savings over the equipment's useful life.

In the first nine years of the Energy Efficiency Utility both organizations have exceeded savings estimates and have done so at a lower cost per MWh than anticipated. Energy efficiency is now being delivered at a total cost of about $.02 to $.03 per kilowatt-hour statewide. When compared with other energy sources, energy efficiency remains the state's best bargain for future supply. Avoiding electric generation also avoids the associated air emissions and other environmental impacts that impact Vermont and the region.

BED looks forward to continuing work in 2009 with the EEU, Contract Administrator and DPS on the challenges and rewards that the ISO-NE Forward Capacity Market presents to Vermont.

2008 brings to a close the end of a three-year EEU program cycle. As part of BED's bilateral agreement with the VT-DPS to implement certain EEU programs, BED and the VT-DPS established performance standards for the 2006-2008 program cycle. The following chart describes the standards and BED results:

Table 7: BED EEU Program Implementation Performance Indicators- by end of 2006-2008

Line #	Definition	Minimum Requirement	Policy Goal Advanced	By	Results as of 12/31/08
1	Meet Estimated Annual MWh goals	Three year target is 11,558 MWh's	A predetermined target helps to ensures that all cost effective energy efficiency resources are being aggressively pursued by BED	NA	Total three-year savings of 22,830 mWh.
2	Meet a minimum electric benefits standard	Total Resource Benefits benefit/cost ratio greater than 1.0; including only Electric Benefits	This requirement is intended to ensure that BED produces at least enough electricity resource savings to cover contributions by BED's consumer-owners. Also, to ensure that resources are being obtained cost effectively and at or below market power costs.	NA	BCR of 1 or greater was achieved for all measures. TRM or statewide screening tool used for all measures.
3	Threshold (or minimum acceptable) level of participation by low-income households	10% of program spending to be for low-income single and multifamily services	Equity for low-income customers	Assuring that a minimum level of BED's overall efficiency efforts, as reflected in spending, will be dedicated to low-income households	$265,390 was spent over the period on LISF and REEP MF projects which is 8% of total spending.
4	Threshold (or minimum acceptable) level of participation by small non-residential customers	40% of total non-residential accounts with savings are accounts with annual electric use of 40,000 kWh/yr or less	Equitable share of service to smaller non-residential customers.	Offsets incentive to concentrate on larger non-residential customers, where BED's cost per kWh is lower	14,345 mWh was saved in Business Services and 6,597 mwh or 47% was saved by commercial customers using less than 40,000 kWh/yr.
5	Summer Peak kW Demand Savings	3,020 KW cumulative by end of 2008	Designed to encourage BED to achieve superior levels of peak summer demand savings in addition to annual energy savings and total resource benefits.	Leveraging project implementation to maximize summer peak demand savings.	BED achieved 2,709 KW or 90% of the three-year goal.
6	Increase the market share of new 5-star Energy Rated Homes	Doubling of market share - 30% to 60% - (of 2003-2004 average) activity in Burlington) of residential units in new buildings with 5-star Energy Ratings, including single- and multi-family units.	Work with EVT and VGS to promote the revised VESH program to encourage the building community's participation.	Use BED's role in city's permitting approval process to promote and encourage greater VESH participation.	Of the 24 buildings (representing 73 housing units) built during the period 16 (or 67%) of the buildings achieved 5 Star Energy Ratings.
7	Number of business new construction, addition, and renovation projects that participate in the LEED green building design track.	10% of total projects participating for all years (2006, 2007 and 2008).	Capture additional societal resource benefits across all building components and systems.	Promote, assist and educate owners, users and building designers on advanced building design approaches and techniques.	Of 34 projects we had 7 projects (20%) that are now LEED certified.

Table 8: EEU Business & Residential - Total Resource Benefits

Avoided costs of Electricity	$6,663,907.07
Fossil Fuel Savings	($126,128.58)
Water Savings	$142,732.03
TRB Total	$6,680,510.51

	Annualized	**Lifetime**
Meter MWh	6,105	63,948
Generation MWh	7,625	77,009
Meter Demand Kw	2,883	27,012
Generation Peak Summer Kw	859	8,344
Generation Peak Winter Kw	1,207	11,931
Water Savings	1,871	24,472
Fuel Increase	-2,099	-17,586
O+M Savings	$97,149	$575,598

Table 9: EEU Business & Residential - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	1,948	6,329	1,742	1,730	18,586
Audits	353	307			2,222
Audits with Installation	302	226			1,914
--- Program Costs ---					
BED Administration Costs					
General	$96,083	$159,391			$1,045,719
Implemntation	$41,957	$56,655			$416,337
Planning	$20,188	$1,806			$77,628
Marketing	$24,624	$177,336			$387,885
IT Development	$28,677	$33,100			$173,509
	$211,529	**$428,288**			**$2,101,079**
BED Service Costs					
Participants	$373,751	$410,583			$2,531,347
Trade Allies	$0	$0			$11,761
	$373,751	**$410,583**			**$2,543,108**
BED Incentive Costs					
Participants	$439,774	$639,549			$2,912,758
Trade Allies	$1,579	$141			$26,737
	$441,353	**$639,690**			**$2,939,495**
BED Total Costs	**$1,026,632**	**$1,478,562**			**$7,583,682**
Evaluation Costs	**$52,025**	**$65,159**			**$287,261**
Participant	**$1,353,054**	**$1,124,233**			**$10,697,726**
Total Program Costs	**$2,431,711**	**$2,667,954**	**$1,597,414**	**$1,459,385**	**$18,568,670**
--- Benefits ---					
Annualized	9,081	7,626	4,734	6,445	41,367
Lifetime mWh	120,140	77,008			562,175
Winter peak Kw	1,207	1,207			5,514
Summer Peak Kw	984	860			5,119
mWh / Participant	5	1	3	4	2
Weighted Lifetime	13	10			14

Table 10: EEU Business & Residential - End Use Summary

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Air Conditioning	227	294.18	302.84	5,076.24	17.46	110.46	0.00	0.00
Clothes Drying	8	7.82	6.89	96.40	1.85	1.33	-26.64	0.00
Clothes Washing	242	45.77	61.21	856.92	8.99	6.68	-24.67	1,512.40
Dishwashing	7	0.23	0.27	3.49	0.05	0.03	0.93	5.75
Engineered Custom	3	778.87	911.62	14,302.76	170.16	0.00	0.00	0.00
Hot Water	117	122.87	82.33	1,078.79	38.60	21.32	-380.34	352.80
Lighting	6191	4,488.77	5,846.67	49,414.79	939.37	681.96	-1,601.44	0.00
Motors	16	113.57	126.71	1,774.17	1.27	2.17	-223.00	0.00
Multiple	21	41.02	46.36	684.38	0.62	16.33	0.00	0.00
Refrigeration	238	133.69	152.73	2,098.88	14.89	13.64	0.00	0.00
Space Heating	24	73.50	81.95	1,567.95	12.74	4.58	-74.39	0.00
Ventilation	28	4.56	5.37	53.74	0.60	0.60	0.00	0.00
Total		6,104.86	7,624.95	77,008.52	1,206.61	859.10	-2,329.55	1,870.95

2.1 Business Services Overview

Overall, 2008 provided strong results in business services. BED projected 3,451 megawatt-hour (MWh) savings in 2008, while achieving actual annual energy savings of 3,437 MWh. Lifetime MWh savings from installed measures were 52,192. BED's cost to deliver EEU business services in 2008 was $720,303, below the budgeted amount of $1,068,416 by 32%.

The new construction market in Burlington was not as active as we originally estimated as several projects were delayed or postponed. However, Business Existing Facilities was very active in 2008 largely due to a number of University of Vermont (UVM), Gilbane Properties (home of General Dynamics), Burlington School District and Fletcher Allen Health Care (FAHC) renovations and equipment replacement projects.

It is often difficult to forecast savings and expenses in the C&I sector in Burlington. This is due to the potential for completion of a few large unexpected projects by one or two customers, dramatically exceeding projections and budgets. On the other hand, savings goals may just as unpredictably be missed due to delays or cancellations of planned significant projects.

The slow down in commercial new construction looks to be continuing in 2009 as several planned projects by UVM, Champlain College and others have been delayed or postponed.

Regarding efficient lighting, BED's project managers continue to report that the more stringent lighting power density (LPD) and controls requirements within CBES (that started as of January 1, 2007 throughout the state) has reduced the potential pool of cost-effective lighting and controls savings.

Commercial lighting technologies continue to improve but the next few years will be challenging for BED and EVt as the pool of cost-effective savings above CBES has declined. Both organizations with continue to work with vendors on an "upstream"

incentive program designed to entice vendors to stock and promote the highest efficiency products.

This section of the report contains information on BED's Business EEU Services: Business New Construction and Business Existing Facilities (Market Opportunities & Retrofit).

Table 11: EEU Business - Total Resource Benefits

Avoided costs of Electricity	$4,329,101.05
Fossil Fuel Savings	($73,725.55)
Water Savings	$0.00
TRB Total	$4,255,375.48

	Annualized	**Lifetime**
Meter MWh	2,942	44,451
Generation MWh	3,437	52,192
Meter Demand Kw	621	10,247
Generation Peak Summer Kw	338	5,435
Generation Peak Winter Kw	390	6,608
Water Savings	0	0
Fuel Increase	-688	-11,913
O+M Savings	$3,280	$31,042

Table 12: EEU Business - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	113	87	102	105	664
Audits	104	98			519
Audits with Installation	88	64			409
--- Program Costs ---					
BED Administration Costs					
General	$44,296	$53,602			$498,662
Implemntation	$13,799	$17,651			$206,642
Planning	$12,594	$1,158			$44,985
Marketing	$23,130	$15,466			$141,912
IT Development	$17,127	$16,064			$85,848
	$110,946	**$103,940**			**$978,048**
BED Service Costs					
Participants	$243,876	$250,666			$1,622,000
Trade Allies	$0	$0			$6,780
	$243,876	**$250,666**			**$1,628,780**
BED Incentive Costs					
Participants	$278,912	$365,698			$1,798,088
Trade Allies	$1,301	$0			$2,533
	$280,213	**$365,698**			**$1,800,621**
BED Total Costs	**$635,035**	**$720,303**			**$4,407,449**
Evaluation Costs	**$33,320**	**$43,576**			**$181,793**
Participant	**$977,107**	**$841,866**			**$8,014,604**
Total Program Costs	**$1,645,462**	**$1,605,745**	**$1,068,416**	**$958,600**	**$12,603,846**
--- Benefits ---					
Annualized	5,931	3,437	3,451	3,375	27,369
Lifetime mWh	96,781	52,192			426,976
Winter peak Kw	495	390			2,478
Summer Peak Kw	524	339			3,052
mWh / Participant	52	40	34	32	41
Weighted Lifetime	16	15			16

Table 13: EEU Business - End Use Summary

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Air Conditioning	17	279.69	286.70	4,845.91	17.36	92.60	0.00	0.00
Engineered Custom	3	778.87	911.62	14,302.76	170.16	0.00	0.00	0.00
Lighting	135	1,570.68	1,887.67	27,881.16	184.12	215.18	-443.98	0.00
Motors	16	113.57	126.71	1,774.17	1.27	2.17	-223.00	0.00
Multiple	21	41.02	46.36	684.38	0.62	16.33	0.00	0.00
Refrigeration	9	102.18	116.07	1,475.95	9.81	8.49	0.00	0.00
Space Heating	5	55.56	61.40	1,227.95	6.67	3.73	-224.50	0.00
Total		2,941.58	3,436.53	52,192.27	390.01	338.49	-891.48	0.00

2.1.1 Business New Construction

Program Description

This service helps commercial and industrial builders and developers incorporate the most energy efficient products and systems possible when building or renovating. It is designed to help customers exceed the City of Burlington's required Guidelines for Energy Efficient Construction (which adopted the statewide CBES energy code as of January 1, 2007). By working directly and early in the process with designers and owners, BED assists in the choice of energy efficient systems, products, materials and construction techniques that meet business and energy needs.

The program offers prescriptive and custom tracks for Act 250 and non-Act 250 projects, providing financial incentives for the installation of cost effective efficiency measures. This includes a minimum package of efficiency criteria including lighting, motors and HVAC systems that all customers must include to be eligible to participate. Eligible participants gain technical assistance, verification services and financial incentives to help with efficient equipment costs. BED's Business New Construction service addresses all energy (especially electricity) consuming equipment, components or practices, including motors, lighting, heating, ventilation and air-conditioning (HVAC).

Natural gas is almost universally available in Burlington. To insure comprehensiveness in building and system designs, BED coordinates with Vermont Gas Systems (VGS) on all projects. The two utilities notify each other when projects are identified or when major changes are considered by the developers or the design teams. This partnership is mutually beneficial to both organizations and the ratepayers.

BED maximizes the adoption of energy efficient systems and techniques through proactive outreach and recruitment. As both an electric distribution utility and a municipal department with a role in the City's design review process, BED is in a unique position to identify new construction and major renovation before significant design efforts begin. BED coordinates this effort with other city agencies including the city's

Planning & Zoning Department and its Department of Public Works. See the Design Review Guide (Attachment A) for an example of our coordinated efforts.

BED continues to support enforcement and provide administration of the Guidelines for Energy Efficient Construction for the City of Burlington, VT (adopted CBES), the energy code for all new construction and renovation in the City. As of 2007, Burlington is the only municipality in the State of Vermont that currently enforces a commercial and industrial building energy code. The benefits of the Business New Construction program have evolved into a very important facet of the city's economic development efforts. Because BED is involved in the very earliest stages of project development, the benefits of energy efficiency are packaged along with other attractive elements that entice businesses to locate facilities in the city, enhancing employment growth and economic development in Burlington.

Program Highlights

2008 results in this program did not meet expectations as described above. There were 22 participants with completed installations with corresponding energy savings of 336 megawatt-hours (MWh) versus the projected 1,330 MWh. Lifetime savings were 5,634MWh. Peak coincident demand savings totaled 32 kilowatts (kW) in the winter and 66 kW in the summer.

Program spending totaled $192,364, or 50% lower than the projected spending of $388,863.

Project Highlights

The Goose Court Armory project (**picture of T5 gym lighting below**) was the largest project completed in 2008. This former Vermont National Guard armory building was completely renovated and is now owned by the City of Burlington and used as a community recreation center. BED worked successfully with the developer to install high efficiency HVAC equipment and controls along with very efficient lighting and controls package. VGS also participated in this project providing technical assistance and incentives.

Variance Discussion

As stated earlier, program savings were significantly below the projections included in BED's budget for 2008. 2005-2007 were very busy years for large commercial new construction in Burlington, for completed projects as well as projects in the design phase. Although we mentioned in previous annual reports that it is not expected that high energy savings can continue or be expected from year to year, we did not fully anticipate the steep decline in new construction completions in 2008. The impact from the economic downturn was fairly rapid.

Customers make business decisions independent of BED's program budgeting efforts, and we fully anticipate that year to year efforts will be "lumpy", and show dramatic swings in performance. Long-term average results are a better indicator of what can be expected on an annual basis than any given year's data.

Table 14: EEU Business New Construction - Total Resource Benefits

Avoided costs of Electricity	$569,164.87
Fossil Fuel Savings	($19,130.68)
Water Savings	$0.00
TRB Total	$550,034.19

	Annualized	**Lifetime**
Meter MWh	291	4,854
Generation MWh	336	5,634
Meter Demand Kw	86	1,422
Generation Peak Summer Kw	66	1,107
Generation Peak Winter Kw	32	556
Water Savings	0	0
Fuel Increase	-162	-3,241
O+M Savings	$1,326	$19,887

Table 15: EEU Business New Construction - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	10	27	11	5	122
Audits	7	25			70
Audits with Installation	5	22			80
--- Program Costs ---					
BED Administration Costs					
General	$20,384	$19,340			$169,063
Implemntation	$8,332	$6,357			$102,435
Planning	$5,839	$452			$11,250
Marketing	$18,375	$11,427			$109,810
IT Development	$7,740	$5,557			$33,986
	$60,670	**$43,133**			**$426,544**
BED Service Costs					
Participants	$87,104	$78,669			$622,575
Trade Allies	$0	$0			$0
	$87,104	**$78,669**			**$622,575**
BED Incentive Costs					
Participants	$84,629	$70,563			$678,715
Trade Allies	$0	$0			$0
	$84,629	**$70,563**			**$678,715**
BED Total Costs	**$232,402**	**$192,364**			**$1,727,835**
Evaluation Costs	**$0**	**$15,857**			**$50,436**
Participant	**$405,256**	**$37,751**			**$2,814,123**
Total Program Costs	**$637,659**	**$245,972**	**$388,863**	**$299,846**	**$4,592,394**
--- Benefits ---					
Annualized	3,731	336	1,330	975	11,819
Lifetime mWh	65,026	5,634			191,018
Winter peak Kw	156	32			909
Summer Peak Kw	207	66			1,349
mWh / Participant	373	12	121	195	97
Weighted Lifetime	17	17			16

Table 16: EEU Business New Construction - End Use Summary

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Air Conditioning	8	19.77	17.73	228.00	0.12	5.70	0.00	0.00
Lighting	33	234.90	275.71	4,767.96	32.04	44.38	-235.09	0.00
Multiple	18	36.73	42.55	638.28	0.06	15.51	0.00	0.00
Total		291.40	336.00	5,634.24	32.22	65.59	-235.09	0.00

2.1.2 Business Existing Facilities

(Market Opportunities & Retrofit Services)

Program Description

Business Existing Facilities, Market Opportunity Service (MOP) targets naturally-occurring equipment changeovers to secure energy savings in the equipment replacement market. Targeted equipment includes lighting, heating, ventilation, cooling, water heating, refrigeration, motors and drives and industrial process applications. This program offers prescriptive and custom tracks, with technical assistance and financial incentives that encourage the adoption of cost effective, high efficiency alternatives to standard efficiency equipment.

BED and EVt offer prescriptive incentives (fixed incentives for specific eligible measures) for building lighting, motors, unitary HVAC equipment and dual enthalpy economizers for unitary HVAC units. BED and EVt also participate jointly in the Northeast Energy Efficiency Partnership to further the market transformation of motors, lighting and HVAC equipment. Incentives for above-average energy efficient equipment are supplied to wholesalers, contractors, and customers at the time of equipment replacement.

Non-prescriptive cost-effective measures or combinations of measures are eligible for custom incentives. Custom incentives are designed to capture as many potential lost opportunity resources as possible, while maximizing program delivery resources. BED staff and trade allies serving Burlington (including equipment vendors, manufacturers, suppliers, contractors, architects and engineers) market the program to potential participants.

As natural gas is the predominant heating fuel in Burlington, BED always works with Vermont Gas Systems (VGS) to encourage a comprehensive approach to energy savings. VGS staff is committed to bringing appropriate projects to BED's attention and BED staff

responds in kind for gas projects. This partnership is mutually beneficial to both organizations and the ratepayers.

Business Existing Facilities, Retrofit Service offers energy efficiency services that have been provided by BED staff for over a decade. Building retrofit entails BED staff and/or trade allies examining customer buildings and systems to identify energy efficiency opportunities for the customer. When promising projects are identified, BED staff prepares analyses for the customer showing the costs and benefits of potential energy efficiency measures. This service is offered to all business customers – from the smallest retail store to the largest commercial and industrial facility. Given BED's long history of delivering this service, the program has reached a high level of maturity and customer acceptance. Facility managers have learned to rely on the program benefits and the technical assistance offered by BED staff.

Business Existing Facilities (MOP & Retrofit) Highlights. In 2008 the program assisted 42 individual locations, many of which installed multiple efficiency measures. The annualized megawatt-hour (MWh) savings for 2008 were 3,101, about 46% higher than the projection of 2,121 MWh. Total BED program costs were $527,934, 22% below the budgeted amount of $679,553.

The Business Existing Facilities 2008 End-Use Activity table shows good diversity in the end use savings but lighting was once again the leader. The diversity of savings across the major end uses demonstrates a high level of comprehensiveness, always an important goal of the program. In addition, a majority of these efficiency measures are strongly coincident with summer loads and thus provide significant avoided peak energy costs to BED.

Variance Discussion

Overall, the Business Existing Facilities services initiative performed very well – delivering savings in excess of targets at below target costs, with diverse end-use results.

BED's project managers attribute much of the success to UVM, Fletcher Allen Health Care, Gilbane Corporation (home to General Dynamics) and the Burlington School District having many building retrofit projects in 2008.

Table 17: EEU Business Existing Facilities - Total Resource Benefits

Avoided costs of Electricity	$3,759,936.17
Fossil Fuel Savings	($54,594.87)
Water Savings	$0.00
TRB Total	$3,705,341.29

	Annualized	**Lifetime**
Meter MWh	2,650	39,597
Generation MWh	3,101	46,558
Meter Demand Kw	536	8,825
Generation Peak Summer Kw	273	4,328
Generation Peak Winter Kw	358	6,052
Water Savings	0	0
Fuel Increase	-526	-8,672
O+M Savings	$1,954	$11,155

Table 18: EEU Business Existing Facilities - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	103	60	91	100	542
Audits	97	73			449
Audits with Installation	83	42			329
--- Program Costs ---					
BED Administration Costs					
General	$23,912	$34,262			$329,599
Implemntation	$5,468	$11,293			$104,206
Planning	$6,755	$706			$33,735
Marketing	$4,755	$4,039			$32,102
IT Development	$9,386	$10,507			$51,862
	$50,276	**$60,807**			**$551,504**
BED Service Costs					
Participants	$156,772	$171,997			$999,424
Trade Allies	$0	$0			$6,780
	$156,772	**$171,997**			**$1,006,204**
BED Incentive Costs					
Participants	$194,283	$295,135			$1,119,373
Trade Allies	$1,301	$0			$2,533
	$195,584	**$295,135**			**$1,121,906**
BED Total Costs	**$402,633**	**$527,939**			**$2,679,615**
Evaluation Costs	**$33,320**	**$27,719**			**$131,357**
Participant	**$571,850**	**$804,115**			**$5,200,481**
Total Program Costs	**$1,007,803**	**$1,359,773**	**$679,553**	**$658,754**	**$8,011,452**
--- Benefits ---					
Annualized	2,200	3,101	2,121	2,400	15,550
Lifetime mWh	31,755	46,558			235,958
Winter peak Kw	339	358			1,569
Summer Peak Kw	317	273			1,703
mWh / Participant	21	52	23	24	29
Weighted Lifetime	14	15			15

Table 19: EEU Business Existing Facilities - End Use Summary

End Use — Business Existing Facilities

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Air Conditioning	9	259.92	268.97	4,617.92	17.24	86.90	0.00	0.00
Engineered Custom	3	778.87	911.62	14,302.76	170.16	0.00	0.00	0.00
Lighting	102	1,335.78	1,611.96	23,113.20	152.08	170.80	-208.89	0.00
Motors	16	113.57	126.71	1,774.17	1.27	2.17	-223.00	0.00
Multiple	3	4.29	3.81	46.10	0.57	0.81	0.00	0.00
Refrigeration	9	102.18	116.07	1,475.95	9.81	8.49	0.00	0.00
Space Heating	5	55.56	61.40	1,227.95	6.67	3.73	-224.50	0.00
Total		2,650.18	3,100.53	46,558.04	357.79	272.90	-656.39	0.00

2.2 Residential Service Overview

2008 provided continued positive results in residential services. Overall, BED greatly exceeded the 2008 energy saving goals for all residential services. BED projected 1,298 annualized MWh savings in 2008, while achieving actual annual energy savings of 4,193 MWh. BED's cost to deliver the residential services in 2008 was $765,744, higher then the budgeted amount of $532,742 by 44%.

For Residential EEU services alone, BED projected 1,283 MWh savings in 2008, while achieving actual annual energy savings of 4,189 MWh. BED's cost to deliver the Residential EEU services in 2008 was $758,258, higher than the budgeted amount of $528,988.

The large disparity in savings and costs can be attributed to the great success of the buy down effort initiated by EVt. By eliminating the customer coupon requirement more retailers joined the program in earnest and customers clearly responded to the convenience, lower prices and better selection.

The VT-DPS, EEU-CA, EVT and BED have been discussing the potential impact on savings claims for standard CFL's with the approaching 2012 Federal standard which will begin to phase out inefficient light sources. Market research has shown rapid market transformation with standard CFL's so EVT and BED have agreed to start reducing savings claims for standard CFL's for the 2009-2011 period. Both organizations will jointly focus on promoting specialty bulbs not impacted by the 2012 Federal standard and also keep a close watch on emerging LED technologies.

It is also worth noting that over the years BED has been successful with electric space heating and electric hot water fuel switching projects but we now see nearly empty markets as high market saturation of natural gas equipment and higher unregulated fossil fuel costs become major factors. BED will continue to explore methods to extract cost-effective electrical savings and total resource benefits from the residential market.

This section of the report contains information on BED's Residential EEU Electric Services: Residential New Construction, Efficient Products and Existing Homes and BED Non-EEU Residential Services: Smartlight and Neighbor$ave.

Table 20: EEU Residential - Total Resource Benefits

Avoided costs of Electricity	$2,334,806.03
Fossil Fuel Savings	($52,403.03)
Water Savings	$142,732.03
TRB Total	$2,425,135.03

	Annualized	**Lifetime**
Meter MWh	3,163	19,497
Generation MWh	4,188	24,816
Meter Demand Kw	2,261	16,765
Generation Peak Summer Kw	521	2,908
Generation Peak Winter Kw	817	5,323
Water Savings	1,871	24,472
Fuel Increase	-1,411	-5,673
O+M Savings	$93,870	$544,555

Table 21: EEU Residential - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	1,835	6,242	1,640	1,625	17,922
Audits	249	209			1,703
Audits with Installation	214	162			1,505
--- Program Costs ---					
BED Administration Costs					
General	$51,787	$105,789			$547,057
Implemntation	$28,158	$39,004			$209,696
Planning	$7,593	$648			$32,644
Marketing	$1,494	$161,870			$245,973
IT Development	$11,550	$17,037			$87,661
	$100,583	**$324,348**			**$1,123,031**
BED Service Costs					
Participants	$129,874	$159,918			$909,348
Trade Allies	$0	$0			$4,981
	$129,874	**$159,918**			**$914,329**
BED Incentive Costs					
Participants	$160,862	$273,852			$1,114,670
Trade Allies	$278	$141			$24,204
	$161,140	**$273,993**			**$1,138,874**
BED Total Costs	**$391,597**	**$758,258**			**$3,176,233**
Evaluation Costs	**$18,705**	**$21,583**			**$105,468**
Participant	**$375,948**	**$282,367**			**$2,683,123**
Total Program Costs	**$786,250**	**$1,062,208**	**$528,998**	**$500,785**	**$5,964,824**
--- Benefits ---					
Annualized	3,150	4,189	1,283	3,070	13,998
Lifetime mWh	23,359	24,816			135,199
Winter peak Kw	712	817			3,036
Summer Peak Kw	460	521			2,067
mWh / Participant	2	1	1	2	1
Weighted Lifetime	7	6			10

Table 22: EEU Residential - End Use Summary

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Air Conditioning	210	14.49	16.14	230.33	0.09	17.87	0.00	0.00
Clothes Drying	8	7.82	6.89	96.40	1.85	1.33	-26.64	0.00
Clothes Washing	242	45.77	61.21	856.92	8.99	6.68	-24.67	1,512.40
Dishwashing	7	0.23	0.27	3.49	0.05	0.03	0.93	5.75
Hot Water	117	122.87	82.33	1,078.79	38.60	21.32	-380.34	352.80
Lighting	6056	2,918.09	3,959.00	21,533.63	755.26	466.78	-1,157.46	0.00
Refrigeration	229	31.51	36.66	622.94	5.08	5.15	0.00	0.00
Space Heating	19	17.94	20.55	340.01	6.08	0.86	150.11	0.00
Ventilation	28	4.56	5.37	53.74	0.60	0.60	0.00	0.00
Total		3,163.28	4,188.42	24,816.25	816.60	520.61	-1,438.07	1,870.95

2.2.1 Residential New Construction

Program Description

This service aims to improve the efficiency of all new homes, and buildings undergoing substantial renovation. This includes single-family homes, multi-family homes and low-income multi-family projects. It addresses all major end uses: space heating, water heating, central cooling (if applicable), ventilation, major appliances and lighting for high use areas. Residential New Construction (RNC) encourages builders and consumers to build to the Vermont Energy Star Home standard. This standard specifies that homes meet the Energy Star performance standard (representing nearly 20% savings in heating, cooling and hot water consumption relative to the Vermont Residential Building Energy Standard (RBES). The standard also requires that at least four lighting fixtures in high use areas be energy efficient, three major appliances and efficient automatically controlled mechanical ventilation be installed.

The Vermont Energy Star Homes (VESH) standard is promoted to developers, architects, builders, building supply centers, equipment suppliers and consumers through a combination of marketing, technical assistance to builders, provision of energy ratings, and a package of incentives for efficient lighting fixtures, major appliances and ventilation equipment.

EVt and Vermont Gas Systems have done a great job over the years promoting VESH which has had direct benefits to BED. As most of the trade allies mentioned above build inside and outside of Burlington, it has been helpful to have a joint program with identical participation requirements.

BED uses several additional methods to encourage participation in this sometimes difficult to influence market. These include:

BED staff attends local monthly Technical Review meetings where all new construction and virtually all substantial renovation projects are introduced to the Burlington Planning and Zoning Department staff as part of the City's local project approval

process. At these meetings BED explains the RNC program to the permit applicant and gives them program literature. BED then forwards the project information to **Vermont Wise Energy Services** to follow-up with the developer. For larger multi-family projects BED staff (in partnership with Vermont Gas Systems) work directly with the property owner.

BED receives monthly "Development Case Load" updates from the Department of Planning and Zoning that track the progress of each of the development projects in Burlington.

New and revised electric service and line extension applications help us track smaller renovation projects that may have bypassed the City's permit approval process. All"ability to serve" letters from BED include information about energy efficiency services.

The Burlington Department of Public Works Inspection Division (DPW) refers projects to BED to help them ensure compliance with RBES (and CBES) and to assess opportunities for exceeding requirements. DPW requires a compliance memo from BED before issuing the building permit.

Program Highlights

Sustainable Building Design - Burlington is now home to eight of Vermont's first LEED buildings (with three more going through the certification process in 2009 including 88 King Street **(pictured below**) an 18-unit mix-use building), including the first LEED-certified multi-family residential development. Waterfront Housing is a 40-unit affordable housing building owned by the Champlain Housing Trust. This project was awarded the "New Construction Design Competition Award" that was presented by EVt at the "Better Buildings by Design" conference in 2004. This project also won numerous other green building awards in 2005 and 2006.

BED's hope back in 2004 was that Waterfront Housing would will serve as a model for future multi-family projects and encourage sustainable building practices in all types of

construction. We believe that the enormous amount of positive press that Waterfront Housing received has helped in some way to encourage other LEED buildings. BED

views LEED Certification as a good process to leverage maximum total resource benefits and to attract participants that may not be swayed by energy efficiency savings alone.

Variance Discussion

The RNC service achieved only 36MWh in annualized electricity savings for the year, about 11% of the projected 316 MWh. At $167,669, spending was 20% below budget for the year's projected spending of $202,177.

BED based the high projected annual savings on information about planned projects that did not complete in 2008. Unfortunately, many of the projects that were in the planning and zoning permitting approval process were delayed or withdrawn.

2009 is not looking very promising for RNC as the poor economic conditions continue. We currently have two new single-family homes enrolled in VESH along with six major

renovations. There are no multi-family construction projects under construction as of April 2009.

BED will continue to encourage deep customer participation for any building projects that are scheduled to start.

Table 23: EEU Residential New Construction - Total Resource Benefits

Avoided costs of Electricity	$68,882.78
Fossil Fuel Savings	$23,103.29
Water Savings	$18,494.22
TRB Total	$110,480.29

	Annualized	**Lifetime**
Meter MWh	33	577
Generation MWh	36	642
Meter Demand Kw	57	944
Generation Peak Summer Kw	7	142
Generation Peak Winter Kw	8	138
Water Savings	231	3,222
Fuel Increase	170	4,371
O+M Savings	$309	$5,595

Table 24: EEU Residential New Construction - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	60	27	102	35	334
Audits	25	12			171
Audits with Installation	4	7			90
--- Program Costs ---					
BED Administration Costs					
General	$13,045	$15,535			$137,938
Implemntation	$12,283	$10,585			$72,826
Planning	$2,930	$77			$9,665
Marketing	$675	$44,085			$69,886
IT Development	$3,836	$4,029			$32,140
	$32,769	**$74,311**			**$322,455**
BED Service Costs					
Participants	$55,633	$53,013			$331,813
Trade Allies	$0	$0			$2,700
	$55,633	**$53,013**			**$334,513**
BED Incentive Costs					
Participants	$26,259	$40,346			$196,876
Trade Allies	$0	$0			$2
	$26,259	**$40,346**			**$196,878**
BED Total Costs	**$114,662**	**$167,669**			**$853,845**
Evaluation Costs	**$6,954**	**$8,247**			**$28,812**
Participant	**$7,300**	**($12,163)**			**$256,479**
Total Program Costs	**$128,916**	**$163,753**	**$202,177**	**$87,563**	**$1,139,137**
--- Benefits ---					
Annualized	111	36	316	70	837
Lifetime mWh	1,849	642			13,738
Winter peak Kw	21	8			226
Summer Peak Kw	12	7			189
mWh / Participant	2	1	3	2	3
Weighted Lifetime	17	18			16

Table 25: EEU Residential New Construction - End Use Summary

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Air Conditioning	6	0.88	1.04	24.92	0.00	3.11	0.00	0.00
Clothes Drying	4	3.91	3.21	44.99	0.88	0.63	-13.32	0.00
Clothes Washing	20	3.78	4.54	63.62	0.98	0.72	1.73	224.80
Dishwashing	7	0.23	0.27	3.49	0.05	0.03	0.93	5.75
Lighting	48	21.37	24.16	437.30	5.14	2.51	0.00	0.00
Refrigeration	12	1.03	1.10	18.64	0.13	0.12	0.00	0.00
Space Heating	9	1.59	1.96	49.11	0.67	0.00	153.44	0.00
Total		32.78	36.29	642.07	7.86	7.13	142.78	230.55

2.2.2 Residential Existing Homes

Program Description

This service aims to improve the efficiency of all existing residential buildings including low-income single family, market-rate single-family and all multi-family projects (market-rate and low-income). BED offers the same existing homes service as Efficiency Vermont (EVt) and also works closely with Vermont Gas Systems (VGS) and the Champlain Valley Weatherization Service (CVWS) on many of its projects.

Low-income buildings are addressed by a partnership with the state's Low-income Weatherization Assistance Program (WAP). This partnership provides electric efficiency measures (including fuel switching of electric hot water and electric space heating) to Burlington's low-income electricity consumers. Electrical efficiency measures are delivered to income-eligible electric customers at the time they receive thermal shell, space heating and water heating improvements from CVWS.

This service also works closely with high usage households for energy efficiency improvements that can significantly reduce their energy bills. On-site energy audits, customer education, appliance meter loans, technical assistance, project management and cash incentives are all part of this service. In some cases, the high usage is driven by electric domestic hot water and\or electric resistance space heating. The opportunity to convert to natural gas is available to the owners of some of these housing units, providing significant energy and cost savings.

Over the past few years, BED and EVT have been trying to work more successfully in the private (market-rate) rental housing market (customers not eligible for low-income energy services) to increase both participation and the depth of savings per participant. Traditionally, renters have not been strong participants and the same holds true for property-owners where the tenants pay the energy bills directly.

The "Rental Properties Owners" service offers free tank wraps (electric tanks only), pipe insulation and water saving devices along with up to fifteen free screw-in CFL's per apartment.

This service provides savings directly to the tenant but also water savings to the property owner. This service allows us the opportunity to develop long-lasting relationships with property-owners to help identify further savings from early refrigeration replacements, common area lighting and laundry equipment improvements, weatherization and ventilation.

BED has also been working successfully with JUMP (Joint Urban Ministry Program) over the past two years by providing free CFL's and efficiency education and program information to families and individuals in need. The idea is for JUMP staff to inform participants (mostly all renters) about energy usage and bills and encourage them to participate in energy efficiency programs. JUMP staff makes direct referrals to CVWS for low-income weatherization services or to BED for assistance. JUMP also provides language translators to help with the African community within Burlington. This is particularly helpful when there are billing issues that can present a barrier to participation. The translators can also help with communications with rental property-owners.

BED continues to offer a robust energy education service for customers that includes on-site energy audits, lending of appliance meters and custom billing history analysis. BED also continues to provide energy efficiency information in a variety of forums. BED staff also visited several classrooms in the Burlington School District to discuss energy efficiency with faculty and schoolchildren.

BED continues to work with EVt and VGS on the Home Performance with ENERGY STAR (HPES) service. BED offers the same contractor and customer incentives that are available through EVt. Also, starting in 2008, BED contracted with VGS to install CFL's and collect potential electrical energy efficiency savings information while perform normal VGS energy audits.

Program Highlights

In 2008 alone, 35 fuel switch projects were completed. 31 electric hot water tanks were switched to natural gas, 1 dwelling replaced electric heat with natural gas space heating equipment and 3 electric clothes dryers were switched to natural gas units. 8 customers and contractors took advantage of rebates for ENERGY STAR furnace fans and 2 customers installed ENERGY STAR central air conditioning systems. BED and EVt offer incentives to the contractor and the building owner to install this equipment. Vermont Gas Systems offers additional incentives to install high efficiency space and water heating equipment.

Variance Discussion

The Residential Existing Buildings service achieved 492 MWh in annualized electricity savings for the year, about 14% higher than the projected 432 MWh. At $317,626, spending was more than 100% over budget for the year. BED projected spending of $152,035.

It is worth noting that the primary focus of past program efforts, electric resistance space and water heating, is a slowly disappearing market as high market saturation becomes a factor. To meet this challenge, BED and EVt have embarked on a more aggressive campaign to increase participation in the rental housing market with both property owners and tenants. Starting in 2007, higher incentives were being offered for lighting, early refrigerator replacement and fuel switching electric clothes dryers. Higher program costs in 2008 also reflect BED's Co-sponsorship with EVt of Project Porch light (please contact BED for more information about Project Porch light).

Table 26: EEU Residential Existing Homes - Total Resource Benefits

Avoided costs of Electricity	$594,934.60
Fossil Fuel Savings	($38,628.27)
Water Savings	$20,824.00
TRB Total	$577,130.33

	Annualized	**Lifetime**
Meter MWh	500	4,341
Generation MWh	493	4,032
Meter Demand Kw	463	4,347
Generation Peak Summer Kw	52	534
Generation Peak Winter Kw	132	1,201
Water Savings	353	3,223
Fuel Increase	-397	-5,739
O+M Savings	$19,303	$117,352

Table 27: EEU Residential Existing Homes - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	302	5,096	168	90	6,477
Audits	222	194			1,517
Audits with Installation	209	152			1,401
--- Program Costs ---					
BED Administration Costs					
General	$26,451	$53,704			$213,999
Implemntation	$7,048	$12,042			$72,047
Planning	$2,947	$704			$10,888
Marketing	$584	$95,833			$103,629
IT Development	$5,277	$8,218			$35,538
	$42,307	**$170,500**			**$436,101**
BED Service Costs					
Participants	$46,193	$53,985			$300,640
Trade Allies	$0	$0			$0
	$46,193	**$53,985**			**$300,640**
BED Incentive Costs					
Participants	$94,377	$93,000			$392,937
Trade Allies	$278	$141			$24,176
	$94,655	**$93,141**			**$417,113**
BED Total Costs	**$183,155**	**$317,626**			**$1,153,854**
Evaluation Costs	**$6,121**	**$6,206**			**$31,828**
Participant	**$152,266**	**$29,392**			**$960,235**
Total Program Costs	**$341,542**	**$353,224**	**$152,035**	**$143,236**	**$2,145,916**
--- Benefits ---					
Annualized	510	493	432	200	3,371
Lifetime mWh	7,494	4,032			56,074
Winter peak Kw	235	132			1,017
Summer Peak Kw	108	52			552
mWh / Participant	2	0	3	2	1
Weighted Lifetime	15	8			17

Table 28: EEU Residential Existing Homes - End Use Summary

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Air Conditioning	3	0.22	0.24	4.33	0.00	0.65	0.00	0.00
Clothes Drying	4	3.91	3.67	51.41	0.97	0.70	-13.32	0.00
Hot Water	117	122.87	82.33	1,078.79	38.60	21.32	-380.34	352.80
Lighting	5086	340.56	368.83	2,322.70	84.19	25.11	0.00	0.00
Refrigeration	39	11.62	13.56	230.47	2.38	2.37	0.00	0.00
Space Heating	10	16.35	18.58	290.90	5.41	0.86	-3.33	0.00
Ventilation	28	4.56	5.37	53.74	0.60	0.60	0.00	0.00
Total		500.09	492.59	4,032.35	132.14	51.61	-396.99	352.80

2.2.3 Retail Products

Program Description

The Efficient Products Program (EP) aims to increase sales of DOE\EPA ENERGY STAR® qualified lighting products, Compact Fluorescent (CFL) screw-in bulbs, CFL hardwired fixtures, and ENERGY STAR® appliances such as clothes washers, refrigerators, freezers, and ceiling fans with lights, room air conditioners and dehumidifiers. This is accomplished primarily through retail stores with on-site and mail-in consumer rebates, but also by arranging retailer buy-downs and manufacturer mark-downs for CFL products.

The program pursues this objective with extensive outreach to retailers, such as efforts to encourage Vermont lighting showrooms to increase the number and variety of energy efficient fixtures stocked and displayed. Field representatives personally visit every participating retail store at least three times per year; larger stores are visited more frequently.

The program provides consumer rebates for ENERGY STAR® -qualified bulbs, fixtures, refrigerators, ceiling fans with lights, window AC units, clothes washers, dehumidifiers and freezers. These incentives are intended to entice consumers by lowering the cost of efficient products. EP uses a variety of marketing and promotion efforts in addition to its prominently displayed in-store rebate coupons including a catalog, and an on-line purchase web site in order to build consumer awareness and participation in the program.

Program Highlights

In 2008 alone, BED customers purchase about 41,000 CFL bulbs, 150 CFL fixtures, 135 ENERGY STAR® air conditioners, 223 ENERGY STAR® clothes washers and 185 ENERGY STAR® refrigerators.

Variance Discussion

Program savings of 3,660 annualized MWh greatly exceeded the projection of 535 annualized MWh that BED estimated in 2005 for the 2006-2008 program period. Annual expenditures were $272,963 which is 56% over the projected budget of $174,786. The large disparity in savings and costs can be attributed to the great success of the CFL buy down effort initiated by EVt. By eliminating the customer coupon requirement more retailers joined the program in earnest and customers clearly responded to the convenience, lower prices and better selection.

Program Changes

The VT-DPS, EEU-CA, EVT and BED have been discussing the potential impact on savings claims for standard CFL's with the approaching 2012 Federal standard which will begin to phase out inefficient light sources. Market research has shown rapid market transformation with standard CFL's so EVT and BED have agreed to start reducing savings claims for standard CFL's for the 2009-2011 period. Both organizations will jointly focus on promoting specialty bulbs not impacted by the 2012 Federal standard and also keep a close watch on emerging LED technologies.

Table 29: EEU Efficient Products - Total Resource Benefits

Avoided costs of Electricity	$1,670,988.64
Fossil Fuel Savings	($36,878.05)
Water Savings	$103,413.82
TRB Total	$1,737,524.41

	Annualized	**Lifetime**
Meter MWh	2,630	14,579
Generation MWh	3,660	20,142
Meter Demand Kw	1,741	11,473
Generation Peak Summer Kw	462	2,233
Generation Peak Winter Kw	677	3,983
Water Savings	1,288	18,026
Fuel Increase	-1,184	-4,305
O+M Savings	$74,257	$421,608

Table 30: EEU Efficient Products - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	1,473	1,119	1,370	1,500	11,111
Audits	2	3			15
Audits with Installation	1	3			14
--- Program Costs ---					
BED Administration Costs					
General	$12,291	$36,550			$195,120
Implemntation	$8,826	$16,377			$64,824
Planning	$1,717	($133)			$12,090
Marketing	$234	$21,952			$72,458
IT Development	$2,438	$4,790			$19,983
	$25,507	**$79,538**			**$364,474**
BED Service Costs					
Participants	$28,048	$52,920			$276,895
Trade Allies	$0	$0			$2,281
	$28,048	**$52,920**			**$279,176**
BED Incentive Costs					
Participants	$40,225	$140,506			$524,857
Trade Allies	$0	$0			$26
	$40,225	**$140,506**			**$524,883**
BED Total Costs	**$93,780**	**$272,963**			**$1,168,534**
Evaluation Costs	**$5,630**	**$7,130**			**$44,828**
Participant	**$216,382**	**$265,138**			**$1,466,409**
Total Program Costs	**$315,792**	**$545,231**	**$174,786**	**$269,986**	**$2,679,771**
--- Benefits ---					
Annualized	2,529	3,660	535	2,800	9,790
Lifetime mWh	14,016	20,142			65,387
Winter peak Kw	456	677			1,793
Summer Peak Kw	340	462			1,326
mWh / Participant	2	3	0	2	1
Weighted Lifetime	6	6			7

Table 31: EEU Efficient Products - End Use Summary

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Air Conditioning	201	13.39	14.86	201.07	0.09	14.10	0.00	0.00
Clothes Washing	222	41.99	56.66	793.31	8.01	5.96	-26.40	1,287.60
Lighting	922	2,556.16	3,566.01	18,773.63	665.93	439.16	-1,157.46	0.00
Refrigeration	178	18.86	22.01	373.82	2.57	2.65	0.00	0.00
Total		2,630.41	3,659.54	20,141.83	676.60	461.87	-1,183.86	1,287.60

3 Overview of BED Services Results

This section of the report contains information on BED's Non-EEU Services: Smartlight (a CFL lease program for residential and commercial customers) and Neighbor$ave (a program for electric hot water users).

Overall, BED missed 2008 energy saving goals for Non-EEU services by 17%. BED projected 108 annualized MWh savings in 2008, while achieving annual energy savings of 89 MWh. However, when combined with savings from Efficient Products and Residential Existing Homes, all customers were well served. BED's cost to deliver the residential services in 2008 was $23,873, slightly higher then the budgeted amount of $23,021.

As discussed in more detail in the Smartlight program descriptions below, the Efficient Products program has clearly become the more popular customer option to obtain CFLs. We continue to see a steep decline in Smartlight participation, especially residential. EVT should be congratulated for their work in this area especially with the buy down process that avoids the need for customer coupons.

As discussed in more detail in the Neighbor$ave program description below, with the success of the "rental properties owners" service within Residential Existing Homes, BED plans to combine Neighbor$ave with Residential Existing Homes starting in 2009. As both programs offer identical measures and identical customer incentives (and all measure savings claims follow the TRM prescriptive savings process) it would be more administratively efficient to have one program title and reporting structure. The exact same Neighbor$ave services will be offered and delivered to BED customers as always but costs and savings tracked under Residential Existing Homes.

Table 32: BED Business & Residential - Total Resource Benefits

Avoided costs of Electricity	$30,345.50
Fossil Fuel Savings	$0.00
Water Savings	$0.00
TRB Total	$30,345.50

	Annualized	**Lifetime**
Meter MWh	64	230
Generation MWh	89	320
Meter Demand Kw	22	84
Generation Peak Summer Kw	18	64
Generation Peak Winter Kw	10	39
Water Savings	0	0
Fuel Increase	0	0
O+M Savings	$1,289	$4,676

Table 33: BED Business & Residential - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	97	63	75	25	8,490
Audits	22	15			2,417
Audits with Installation	22	15			1,611
--- Program Costs ---					
BED Administration Costs					
General	$34,097	$6,959			$1,652,461
Implemntation	$10,230	$12,619			$1,416,924
Planning	$0	$0			$856
Marketing	$0	$0			$214,677
IT Development	$0	$0			$5,648
	$44,327	**$19,578**			**$3,290,566**
BED Service Costs					
Participants	$1,731	$1,453			$35,178
Trade Allies	$0	$0			$0
	$1,731	**$1,453**			**$35,178**
BED Incentive Costs					
Participants	$0	$0			$1,889,913
Trade Allies	$0	$0			$1,683
	$0	**$0**			**$1,891,596**
BED Total Costs	**$46,058**	**$21,031**			**$5,217,340**
Evaluation Costs	**$0**	**$0**			**$221,367**
Participant	**$597**	**$2,842**			**$6,355,235**
Total Program Costs	**$46,656**	**$23,873**	**$23,021**	**$9,500**	**$11,793,942**
--- Benefits ---					
Annualized	146	89	108	35	40,301
Lifetime mWh	543	320			494,928
Winter peak Kw	27	10			8,519
Summer Peak Kw	39	18			2,721
mWh / Participant	2	1	1	1	5
Weighted Lifetime	4	4			12

Table 34: BED Business & Residential - End Use Summary

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Hot Water	14	1.81	2.10	12.99	0.22	0.22	0.00	0.00
Lighting	123	61.90	86.79	307.00	10.21	18.13	0.00	0.00
Total		63.72	88.90	319.99	10.43	18.34	0.00	0.00

3.1.1 Commercial Smartlight Service

Program Description

The Commercial Smartlight service is the oldest and most established of BED's energy efficiency offerings. The Commercial Smartlight Service allows commercial customers to lease any style of compact fluorescent lamp (CFL) offered by BED for $0.35/lamp per month. Each bulb lease is tracked and linked to our customer billing system. After 36 months, the lease fee stops.

The primary method of marketing the commercial Smartlight service is through the Business Existing Facilities service and through daily Customer and Energy Service area customer contacts. In-house customer service and cashier personnel are trained to handle walk-in customers interested in the service. Energy Services Specialists identify potential applications and recommend the appropriate lamp. The service is targeted primarily to small commercial customers who do not normally work with lighting suppliers.

This leasing service allows BED to "decay" the electric savings associated with these bulbs as they are either returned or the lease has ended since the lease term is matched to the expected life of the bulbs. This is an important distinction from other efficiency services and the treatment of savings over their proposed lifetimes.

BED features Smartlight service information on its Web site (in both the home and business sections) and has included a product order form on the site, which customers can use to mail or fax their Smartlight orders in to BED.

Program Highlights

Having both the Smartlight lease and the Efficient Products service instant rebate options has worked well in Burlington as both services give customers two options. Over the years, BED continually expanded its Smartlight service by offering a larger and more varied lighting product line. Next generation products were incorporated on an ongoing basis as existing inventory was exhausted. We aggressively promote high performance products that offer high-quality electronic ballasts, a high color-rendering index and appropriate color temperatures.

We also try to stay with manufacturers that have a proven track record for durability. BED continues to offer dimmable CFLs and continues to see quality improvements but compatibility with all types of dimmers is still a problem. All these products are ENERGY STAR® labeled.

A large Smartlight display is set up in the BED lobby. The working display exhibits the products and includes a meter to visualize energy savings. BED staff uses the display to assist customers in selecting the correct product for their needs. We also use CFLs in BED's lobby ceiling fixtures to demonstrate the products. The steady improvement in CFL technology in recent years has resulted in greater acceptance in retail stores and restaurants.

Variance Discussion

The Efficient Products program has clearly become the more popular customer option in recent years. EVT should be congratulated for their work in this area especially with the buy down process that has eliminated the need for coupons in many stores. We continue to see a steep annual decline in Smartlight participation. In 2008, savings of 90 MWh were projected and 83 MWh were achieved.

Program Changes

It is worth noting the maturity of CFL technology in today's market place. Although there are still exceptions with some CFL products, lamps that were once fragile, expensive, novel, oversized and gave off a greenish light are today sturdy, compact, and can provide excellent light quality. Furthermore, prices are reaching a point at which many consumers no longer hesitate to make the investment. In addition, the Federal mandate to phase out most incandescent bulbs over the next several years will lead to a day where ratepayer incentive-based programs may no longer be needed.

BED is proud of the small role the Smartlight program has played in helping spur market transformation. However, with the increasing popularity of the buy down program, coupled with the Federal mandate, BED is planning to bring the Smartlight program to a close in 2009.

It is worth noting that we are currently exploring the concept of using the Smartlight lease mechanism for emerging LED screw-in lighting technology in the future. We will continue to

study the LED screw-in market and collaborate with EVT and the VT-DPS on any program offering.

Table 35: BED Commercial Smartlight - Total Resource Benefits

Avoided costs of Electricity	$25,922.56
Fossil Fuel Savings	$0.00
Water Savings	$0.00
TRB Total	$25,922.56

	Annualized	**Lifetime**
Meter MWh	59	201
Generation MWh	83	282
Meter Demand Kw	19	65
Generation Peak Summer Kw	18	61
Generation Peak Winter Kw	9	32
Water Savings	0	0
Fuel Increase	0	0
O+M Savings	$1,191	$4,048

Table 36: BED Commercial Smartlight - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	38	28	30	15	1,640
Audits	2				491
Audits with Installation	2				354
--- Program Costs ---					
BED Administration Costs					
General	$4,585	$2,586			$894,330
Implemntation	$10,230	$7,115			$969,240
Planning	$0	$0			$597
Marketing	$0	$0			$28,645
IT Development	$0	$0			$4,228
	$14,815	**$9,700**			**$1,897,040**
BED Service Costs					
Participants	$154	$0			$18,742
Trade Allies	$0	$0			$0
	$154	**$0**			**$18,742**
BED Incentive Costs					
Participants	$0	$0			$1,103,513
Trade Allies	$0	$0			$0
	$0	**$0**			**$1,103,513**
BED Total Costs	**$14,969**	**$9,700**			**$3,019,295**
Evaluation Costs	**$0**	**$0**			**$81,519**
Participant	**$26**	**$2,178**			**$2,733,643**
Total Program Costs	**$14,995**	**$11,878**	**$16,277**	**$6,500**	**$5,834,457**
--- Benefits ---					
Annualized	134	83	90	33	24,743
Lifetime mWh	455	282			255,070
Winter peak Kw	26	9			4,436
Summer Peak Kw	38	18			2,513
mWh / Participant	4	3	3	2	15
Weighted Lifetime	3	3			10

Table 37: BED Commercial Smartlight - End Use Summary

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Lighting	96	59.03	82.82	281.59	9.29	17.86	0.00	0.00
Total		59.03	82.82	281.59	9.29	17.86	0.00	0.00

3.1.2 Neighbor$ave Service

Program Description

The Neighbor$ave program is designed to deliver energy saving measures and information directly to Burlington Electric Department's residential consumers that use electric domestic hot water. During a 30 to 40 minute visit, a utility employee installs energy and water saving devices and compact fluorescent light bulbs, using the Smartlight lease mechanism.

Installers also briefly survey occupants about energy usage, lighting habits, appliance information and to see if fuel switching is possible. Staff works with customers to identify and install the right compact fluorescent product in the appropriate locations using a "bag of tricks" to optimize the number of lights installed. Electric water heaters are wrapped, low-flow showerheads and faucet aerators installed and hot water pipes are insulated. The Neighbor$ave visit concludes with a customized package of energy efficiency educational material. Questions about energy efficiency are answered on the spot or customers are referred to other energy efficiency services when appropriate.

Program Highlights

Neighbor$ave has been successfully operating for eighteen years, and BED is proud of this award-winning successful program design that achieves cost-effective electrical savings in both the high-use and the non-high-use residential segments. BED's original long-term target market was 8,400 customers. As of December 31, 2008 BED has completed 7,577 unique customer location visits reaching about 90% of its originally stated goal.

Variance Discussion

Savings of 3 MWh were projected. The program achieved 2 MWh. BED is not concerned about the variance as many of the customers that originally inquired about Neighbor$ave opted for the fuel switching program when presented with savings and incentive information.

Also, most customers that would have been served by the program in the past are now receiving these services through the Residential Existing Homes service. The “rental properties owners” service that EVT and BED developed in 2007 to better serve the private rental housing

market (not eligible for low-income energy services) offers free tank wraps (electric tanks only) , pipe insulation and water saving devices along with up to fifteen free screw-in CFL's per apartment.

BED and EVT have been trying to work more successfully in the private rental housing market to increase both participation and the depth of savings per participant. This service provides savings directly to the tenant but also water savings to the property owner. It also allows us the opportunity to develop long-lasting relationships with property-owners to help identify further savings from early refrigeration replacements, common area lighting and laundry improvements, weatherization and ventilation. Property-owners who have chronic moisture related damage from poor performing bathroom exhaust greatly appreciate the technical assistance we provided on effective bathroom ventilation.

Program Changes

With the success of the "rental properties owners" service, BED plans to combine Neighbor$ave with Residential Existing Homes starting in 2009. As both programs offer identical measures and identical customer incentives (and all measure savings claims follow the TRM prescriptive savings process) it would be more administratively efficient to have one program title and reporting structure.

Table 38: BED Neighbor$ave - Total Resource Benefits

Avoided costs of Electricity	$2,437.49
Fossil Fuel Savings	$0.00
Water Savings	$0.00
TRB Total	$2,437.49

	Annualized	**Lifetime**
Meter MWh	2	11
Generation MWh	2	13
Meter Demand Kw	1	4
Generation Peak Summer Kw	0	1
Generation Peak Winter Kw	0	1
Water Savings	0	0
Fuel Increase	0	0
O+M Savings	$0	$0

Table 39: BED Neighbor$ave - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	20	14	15	0	1,074
Audits	20	14			842
Audits with Installation	20	14			353
--- Program Costs ---					
BED Administration Costs					
General	$4,172	$1,665			$100,015
Implemntation	$0	$918			$8,329
Planning	$0	$0			$104
Marketing	$0	$0			$35,688
IT Development	$0	$0			$371
	$4,172	**$2,583**			**$144,507**
BED Service Costs					
Participants	$483	$1,091			$8,156
Trade Allies	$0	$0			$0
	$483	**$1,091**			**$8,156**
BED Incentive Costs					
Participants	$0	$0			($60,304)
Trade Allies	$0	$0			$0
	$0	**$0**			**($60,304)**
BED Total Costs	**$4,655**	**$3,674**			**$92,358**
Evaluation Costs	**$0**	**$0**			**$35,395**
Participant	**$571**	**$292**			**$90,798**
Total Program Costs	**$5,226**	**$3,966**	**$3,000**	**$0**	**$218,551**
--- Benefits ---					
Annualized	7	2	3	0	543
Lifetime mWh	56	13			4,456
Winter peak Kw	0	0			90
Summer Peak Kw	0	0			27
mWh / Participant	0	0	0		1
Weighted Lifetime	8	6			8

Table 40: BED Neighbor$ave - End Use Summary

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Hot Water	14	1.81	2.10	12.99	0.22	0.22	0.00	0.00
Total		1.81	2.10	12.99	0.22	0.22	0.00	0.00

3.1.3 Residential Smartlight Service

Program Description

The Residential Smartlight service is the oldest and most established of BED's energy efficiency offerings. This simple program promotes the use of compact fluorescent light bulbs through a leasing mechanism. Customers can lease any of BED's compact fluorescent products for $.20/bulb per month for 60 months, when the lease fee stops. Bulb tracking software is linked to our customer billing system to aid in electrical savings verification. As with Commercial Smartlight, BED is able to "decay" the electric savings associated with these bulbs as they are either returned or the lease has ended since the lease term is matched to the expected life of the bulbs. This is an important distinction from other efficiency programs and the treatment of savings over their proposed lifetimes.

Program Highlights

Having both the Smartlight lease and the Efficient Products program instant rebate options has worked well in Burlington as both programs give customers two options. Over the years, we aggressively promoted high performance products that offer high-quality electronic ballasts, a high color-rendering index and appropriate color temperatures. We also stay with manufacturers that have a proven track record for durability. BED continues to offer dimmable CFLs and continues to see quality improvements but compatibility with all types of dimmers is still a problem. All these products are ENERGY STAR® labeled.

A large Smartlight display that includes a working electric meter is located in BED's lobby. BED staff uses the display to acquaint customers with the variety of bulbs available and help them select the correct product for their needs. Because BED's Pine Street office is a public meeting center and polling place throughout the year, this display is visible to multiple audiences. BED's in-house customer service and cashier personnel are trained to service walk-in and drive-up requests for the Smartlight service.

Variance Discussion

The Efficient Products program has clearly become the more popular customer option. EVT should be congratulated for their work in this area especially with the buy down process that

has eliminated the need for coupons in many stores. We continue to see a steep decline in Smartlight participation. In 2008, savings of 15 MWh were projected and 4 MWh were achieved. However, when combined with the Efficient Products program, savings exceeded projections and having both options available to customers covers the market well.

Program Changes

It is worth noting the maturity of CFL technology in today's market place. Although there are still exceptions with some CFL products, lamps that were once fragile, expensive, novel, oversized and gave off a greenish light are today sturdy, compact, and can provide excellent light quality. Furthermore, prices are reaching a point at which many consumers no longer hesitate to make the investment. In addition, the Federal mandate to phase out most incandescent bulbs over the next several years will lead to a day where ratepayer incentive-based programs may no longer be needed.

BED is proud of the small role the Smartlight program has played in helping spur market transformation. However, with the increasing popularity of the buy down program, coupled with the Federal mandate, BED is planning to bring the Smartlight CFL program to a close in 2009.

It is worth noting that we are currently exploring the concept of using the Smartlight lease mechanism for emerging LED screw-in lighting technology in the future. We will continue to study the LED screw-in market and collaborate with EVT and the VT-DPS on any program offering.

Table 41: BED Residential Smartlight - Total Resource Benefits

Avoided costs of Electricity	$1,985.46
Fossil Fuel Savings	$0.00
Water Savings	$0.00
TRB Total	$1,985.46

	Annualized	**Lifetime**
Meter MWh	3	18
Generation MWh	4	25
Meter Demand Kw	2	15
Generation Peak Summer Kw	0	2
Generation Peak Winter Kw	1	6
Water Savings	0	0
Fuel Increase	0	0
O+M Savings	$98	$628

Table 42: BED Residential Smartlight - Summary

	Prior Year 2007	Current 2008	(Projected) 2008	(Projected) 2009	Program to date
--- Participants ---					
Installations	39	21	30	10	5,776
Audits		1			1,084
Audits with Installation		1			904
--- Program Costs ---					
BED Administration Costs					
General	$25,341	$2,709			$658,117
Implemntation	$0	$4,586			$439,355
Planning	$0	$0			$155
Marketing	$0	$0			$150,344
IT Development	$0	$0			$1,049
	$25,341	**$7,294**			**$1,249,020**
BED Service Costs					
Participants	$1,093	$362			$8,280
Trade Allies	$0	$0			$0
	$1,093	**$362**			**$8,280**
BED Incentive Costs					
Participants	$0	$0			$846,704
Trade Allies	$0	$0			$1,683
	$0	**$0**			**$848,387**
BED Total Costs	**$26,434**	**$7,657**			**$2,105,687**
Evaluation Costs	**$0**	**$0**			**$104,453**
Participant	**$0**	**$372**			**$3,530,794**
Total Program Costs	**$26,434**	**$8,029**	**$3,744**	**$3,000**	**$5,740,934**
--- Benefits ---					
Annualized	5	4	15	2	15,015
Lifetime mWh	32	25			235,402
Winter peak Kw	1	1			3,993
Summer Peak Kw	1	0			181
mWh / Participant	0	0	0	0	3
Weighted Lifetime	6	6			16

Table 43: BED Residential Smartlight - End Use Summary

Description	Participants	Gross Mwh	Net Mwh	Lifetime Net Mwh	Winter Net Kw	Summer Net Kw	MMBTU	CCF
Lighting	27	2.87	3.97	25.41	0.93	0.26	0.00	0.00
Total		2.87	3.97	25.41	0.93	0.26	0.00	0.00

4 Appendix

4.1 Definition and End Notes

Tables 32 and 33 are templates to help explain the appropriate footnotes for each program and summary table throughout this report.

Table 44: Summary Report Table Template

	Prior Year	Current Year 2008 (1)	Projected Year 2008 (2)	Projected Year 2008	Program To Date (3)
Participants					
Installation	(4)				
Audits	(5)				
Audits with Installation	(7)				
Program Costs					
BED Administration Costs	(9)				
General	(10)				
Implementation	(11)				
Planning	(12)				
Marketing	(13)				
IT Development	(14)				
BED Service Costs	(15)				
Service to Participants	(16)				
Service to Trade Allies	(17)				
BED Incentive Costs	(18)				
Participants	(19)				
Trade Allies	(20)				
BED Total Costs	(8)				
Evaluation Costs	(23)				
Participant Costs	(21)				
Total Program Costs	(26)				
Benefits					
Annualized MWh	(27)				
Lifetime MWh	(28)				
Winter Peak KW	(29)				
Summer Peak KW	(30)				
MWh/Participant	(31)				
Weighted Lifetime	(32)				

Table 45: End-Use Report Table Template

Description	Participants	Gross MWh	Net MWh	Lifetime MWh	Winter Net KW	Summer Net KW	MMBTU	CCF
	(33)	(35)	(36)	(34)	(37)	(38)	(39)	(40)

Footnotes for the report table templates:

(1) Verified activity for the current reporting year. For savings this figure will be the estimated savings for measures actually implemented and verified for the current report period. Savings should be reported in MWH, at generation and net of all approved adjustment factors, except as otherwise noted.

(2) Estimated portion of the three-year savings and costs projected for the current report year. This footnote should identify the source of the projections. Projections for categories footnoted (4) to (7), (21) to (26) and (28) to (32) will be provided if available.

(3) Program to date activity. For participation [(4) to (7)], the program to date column should count each customer (premise) only once, regardless of participation in previous years. The executive summary should count each customer (premise) only once, even if a customer was served by more than one program.

(4) Number of customers with verified installations during the current report period. Customer is defined as a unique premise as defined by the utility, with one exception. For master-metered, multifamily buildings, customer is defined as a dwelling unit.

(5) Number of customers who had analyses or audits completed during the current report period.

(7) Number of customers who had analyses or audits during the current report period and have completed one or more installations during the current report period. The number of customers reported in this category should be a subset of the customers counted in (5) above. The program to date column should reflect activity related to all participants with analyses/audits, regardless of when the analysis was conducted.

(8) Total costs incurred by Burlington Electric Department during the current report period. All costs in nominal dollars, (9) + (15) + (18).

(9) Subtotal of all administrative costs detailed in the categories below, (10) + (11) + (12) + (13) + (14).

(10) Costs include general management, budgeting, financial management and legal costs directly associated with program implementation (such as contract review).

(11) Implementation management and administrative costs include costs related to business development and customer service, data management, and other program administrative costs directly related to implementation.

(12) Costs related to program design and planning, program screening and other similar functions.

(13) Costs related to marketing and outreach.

(14) IT development and maintenance costs do not need to be broken out by program, i.e., this category may be filled in only on the executive summary page.

(15) Subtotal reflecting total implementation costs, (16) + (17).

(16) Costs related to conducting audits or analyses, preparing the package of efficiency measures, contract management and post project follow up.

(17) Costs related to educational or other support services provided to entities other than individual program participants, such as trade allies, manufacturers, wholesalers, builders, and architects.

(18) Subtotal reflecting total incentive costs, (19) + (20).

(19) Direct payments made to participants to defray the costs of specific efficiency measures. If a program employs a shared savings mechanism or loan system, this category should include the utility share of the measure and carrying costs projected over the payment period, net of all projected participant payments.

(20) Incentives paid to manufacturers, wholesalers, builders, or other stakeholders.

(21) Total costs incurred by participants related to BED activities during the current report period. This category includes the participant contribution to the capital costs of installed measures and to specific DSM-related services, such as technical assistance or energy ratings.

(23) Evaluation costs, excluding tracking and reporting expenditures.

(24) Total program costs, (8) + (21) + (22) + (23).

(26) Total expenditures associated with the delivery of direct services to participants and trade allies, including all BED, participant and third party costs.

(27) Annualized MWH savings at generation and net of all approved adjustment factors (e.g., free riders, spill over) for measures installed and verified during the current report period.

(28) The lifetime estimated MWH savings for measures installed and verified during the current reporting year, at generation and net of all approved factors. (Estimated annualized savings times the life of the measure).

(29) Estimated impact of measures at time of winter system peak, at generation, net of adjustment factors.

(30) Estimated impact of measures at time of summer system peak, at generation, net of adjustment factors.

(31) Annualized MWH savings per participant, net at generation, i.e., (27) / (4).

(32) Average lifetime, in years, of measures in the program weighted by savings, i.e., (28)/(27).

(33) Number of customers with verified installations of measures within the end use, utility grouping.

(34) The total annualized MWH saved, at generation, net of adjustment factors, should add up to the savings reported in the line item footnoted as (27).

(35) The total lifetime MWH saved, at generation, net of adjustment factors, should add up to the savings reported in the line item footnoted as (28).

(36) The total annualized MWH saved, gross at the customer meter.

(37) The total winter coincident KW, at generation, net of adjustment factors, should add up to the savings reported in the line item footnoted as (29).

(38) The total summer coincident KW, at generation, net of adjustment factors, should add up to the savings reported in the line item footnoted as (30).

(39) Total MMBtu estimated to be saved (positive) or used (negative) for alternative fuels as a result of measures installed in the end use.

(40) Total water saved (CCF) (positive) or used (negative) due to measures installed in the end use.

4.2 Design Review Guide

Burlington
Planning and Zoning

• DESIGN • REVIEW • GUIDE •

Energy Efficient Construction

Burlington is well known as a community with a high quality of life, small and cohesive neighborhoods, a vibrant downtown and waterfront – all within a spectacular setting on the shores of Lake Champlain. This deserving reputation is due in part to the City's small size, entrepreneurial spirit, civic-minded citizens and activist government. One of the many factors that makes Burlington such a great place to live, work and visit is the community's attention to detail, and respect for its setting, heritage and quality urban design.

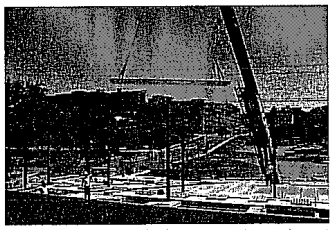
Burlington's Design Review process strives to protect the city's unique qualities and strong sense of place by carrying out citywide development and design objectives. The purpose of this *Design Review Guide* is to help applicants in preparing projects to be reviewed by the City's Design Advisory Board and Development Review Board. Through materials such as this, the Department of Planning & Zoning seeks to make information available well before the final design of a project, saving the applicant and the city, time and money.

Did you know that the initial cost of building construction represents only 1% to 2% of the total cost to build, own and operate a building over a thirty-year life? In addition, buildings are major energy users: the energy needed to heat, cool, light and ventilate buildings represents over 35% of the total national energy usage and 60% of total electricity production.

A well-planned construction project - including careful attention to energy efficiency and worker comfort - can pay dividends over time. Research indicates that buildings with energy efficient features like day-lighting and good ventilation can improve people's attitudes and productivity. Even slight gains in productivity will more than pay for the incremental cost of energy efficient design.

The City of Burlington is committed to promoting energy efficiency in buildings throughout the City. Energy-efficient buildings:

- benefit the owners and tenants by lowering costs,
- improve the lives of citizens by saving consumers money,
- lessen our demand for fossil fuels,
- decrease the need for new power generation,
- reduce pollution and,
- strengthen the local, state and national economy.



It is much cheaper to build efficiency into a new building than to retrofit an existing building later. Burlington's "Energy Efficiency Guidelines for New Construction" describes a minimum level of energy efficiency that must be designed into all new construction.

Energy Efficient Construction Guidelines

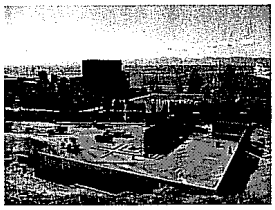
In 1991 the Burlington City Council established an ordinance that requires that all commercial and residential construction and applicable new equipment be in compliance with the "Guidelines for Energy Efficient Construction for the City of Burlington, Vermont". (Art. VI, Energy Conservation, Sec. 8, Burlington Code of Ordinances)

Any new building, addition, renovation or equipment replacement project must meet the energy efficiency criteria of the Guidelines. The Guidelines adopt a national standard as the model energy code for Burlington. This standard is amended to suit Burlington's climate and special needs. The Guidelines contain criteria for the building's roof, exterior walls, and floors/ foundations; and the mechanical, lighting, and power systems.

Residential Construction

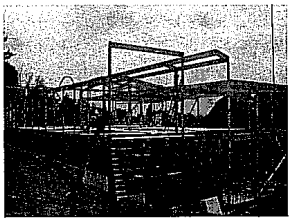
All residential construction must comply with the current edition of the Vermont Residential Building Energy Standard (RBES) and Sec. 21 V.S.A. § 266 of Vermont law as referenced in the Guidelines. The Guidelines amend RBES in Burlington to maintain application to renovation and any covered building component of RBES regardless of size and scope.

As is the case with all other development in Burlington, the Inspection Division of the Dept of Public Works (DPW) is the enforcement authority for compliance with the Guidelines. However, the BED Energy Services staff helps to administer the Guidelines and assists the Inspection Division and applicants with Guidelines applicability, interpretation and construction plan review. The Inspection Division will typically require a letter of approval from BED prior to issuing a building permit.



Steps to Compliance:

- Obtain a copy of the Guidelines by visiting www.burlingtonelectric.com or calling BED, Energy Services at 802-865-7342.
- Contact the DPW Inspection Division (863-9094) and BED Energy Services staff early in your planning process to discuss the project scope and compliance with the Energy Efficiency Guidelines.
- Request free consultation from BED Energy Services staff for ideas to best meet the Guidelines and cost effective design improvements that go beyond the Guidelines.
- Provide a set of design documents to BED Energy Services staff and request a Guidelines plan review and a letter of approval for DPW. This is a free service and BED will act quickly to review your project.
- BED will advise you of any building components that do not meet the Guidelines and how to make necessary design improvements.



Financial Incentives

BED has a long history in helping owners, builders and developers incorporate energy efficient equipment, systems and techniques. BED will work with you to produce innovative, creative building designs that are efficient, cost effective and durable.

If you're planning a new construction project or building renovation, contact BED for assistance from permitting through inspection and occupancy. BED offers:

- technical assistance with building design and Guidelines compliance
- funding for your design team to evaluate various building system options exceeding the Guidelines
- funding assistance for third-party commissioning
- cash incentives for highly efficient equipment and systems.

BED will tailor its program to meet your individual needs - from incremental improvements in energy efficient equipment to advanced building designs incorporating energy efficiency, renewable energy systems and green building design.

Additional Information

assistance with Burlington's Energy Efficiency Guidelines

- **Burlington Electric Dept.**
  585 Pine St., Burlington, VT 05401
  BED Residential Services - 802.865.7337
  BED Commercial Services - 802.865.7342
  www.burlingtonelectric.com
- **Energy Code Assistance Center**
  255 South Champlain St., Burlington, VT 05401
  888.373.2255

general information regarding city zoning permits

- **Burlington Dept. of Planning & Zoning**
  149 Church St., Burlington, VT 05401
  802.865.7188 www.ci.burlington.vt.us/planning/

general information regarding city building permits

- **Burlington Dept. of Public Works, Inspection Services**
  645 Pine St., Burlington, VT 05401
  802.863.9094 www.dpw.ci.burlington.vt.us/

Prepared by the Burlington Department of Planning & Zoning, 2004